5553

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. 5553

LOCALITY

State Rhode Island

General locality Buzzards Bay

1934

CHIEF OF PARTY

W. D. Patterson

LIBRARY & ARCHIVES

DATE .....

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R.S.Patton, *Director*

State: Rhode Island

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 3 **5553**

LOCALITY

~~Vicinity Buzzards Bay~~ Point, R.I.

Vicinity of Sakonnet Point

1934

CHIEF OF PARTY

Wm. D. Patterson, Lieut.,
U. S. Coast & Geodetic Survey.

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5553

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 3

REGISTER NO. 5553

State Rhode Island

General locality Buzzards Bay

Locality Vicinity of Sakonnet Point. Large

Scale 1:10,000 Date of survey Aug. 22 - Oct. 11 1934

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson, U. S. C. & G. S.

Surveyed by Daniel S. Ling, Surveyor

Protracted by J. C. McIlwaine

Soundings penciled by J. C. McIlwaine

Soundings in fathoms feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by C. STANLEY LIGHTBOWN

Verified by "

Instructions dated May 14,1934, and Supplemental Instructions dated July 11 & 31, 1934

Remarks:

U. S. GOVERNMENT PRINTING OFFICE 1931

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET NO. 3 (Field Number)

VICINITY OF SAKONNET POINT, RHODE ISLAND.

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DATE OF INSTRUCTIONS

Director's Instructions dated May 14,1934 and Supplemental Instructions dated July 11 & 31,1934.

SURVEY METHODS

Standard Coast Survey methods were used, obtaining positions with sextant fixes and soundings with hand leadline. The leased launch "Leila T." was used for offshore work and a skiff with outboard motor was used for inshore work.

DANGERS.

Sakonnet Harbor - This harbor is very small and quite shallow. It has absolutely no protection from north and northwest winds. The southern end of the harbor is shallow and sandy, the eastern side is rocky and very foul.

At Latitude 41° 27'.92, Longitude 71° 11'.72 is a rock which is bare except at the highest tides.

At Latitude 41° 27'.94, Longitude 71° 11'.65 (Position 5J), and at Latitude 41° 27'.97, Longitude 71° 11'.66 (Position 6J), are rocks, each with a least depth of 4 feet.

At Latitude 41° 27'.21, Longitude 71° 12'.1 is a submerged rock located by Position 61J with a least depth of 4 feet.

At Latitude 41° 27'.1, Longitude 71° 12'.13 a rock awash at low water located by Position 36J.

The above two rocks are dangers to boats passing inside of Sakonnet Light.

At Latitude 41° 26'.52, Longitude 71° 11'.77, on Schuyler Ledge, a submerged rock located by Position 2H, with a least depth of 8 feet. This checks the charted depth.

At Latitude 41° 26'.65, Longitude 71° 09'.53, on Elisha Ledge, a submerged rock located by Position 77J, with a least depth of 13 feet. This verifies the charted depth.

DANGERS (continued)

At Latitude 41° 28'.1, Longitude 71° 09'.41, a submerged rock located by Position 49M, with a least depth of 4 feet. This rock shown on Chart No. 353 with the same depth. ✓

In general, it is unsafe to go inside the five fathom curve if unfamiliar with the territory as a great many rocks are to be found close to shore.

CHANNELS

No channels exist within the limits of this survey. At high water the smaller local boats pass inside of East Island and West Island but as this is quite shallow with numerous rocks it is not advisable for anyone not familiar with this section to attempt this passage.

COMPARISON WITH PREVIOUS SURVEYS

At Latitude 41° 27'.05, Longitude 71° 14'.2 the charted 44 foot spot was searched for but least depth found was 48 feet. It is recommended that 44 feet be retained as it is doubtful if the shallowest spot was found.

The 44 has been retained

In the mouth of the Sakonnet River the water is somewhat deeper than shown on the chart, the ten fathom curve extending farther up the river.

On Schuyler Ledge at Latitude 41° 26'.5, Longitude 71° 11'.8, the various charted depths were searched for but except for the 8 foot sounding on the highest pinnacle slightly deeper soundings were obtained than those charted. However it is recommended that present charted depths be retained as probably the shallowest spots were not found.

All of the shoaler surrounding depths have added to the present survey.

On Dolphin Rock at Latitude 41° 27'.2, Longitude 71° 11'.1, chart shows 16 feet but the shallowest depth obtained by drift soundings over the spot was 17 feet. However it is possible that the highest peak was not hit.

The 16 ft. sdg. is being carried forward in red.

Southeast of Dolphin Rock a charted depth of 26 feet was searched for. The least depth obtained here was 29 feet but it is recommended the charted depth be retained. *The 26 has been retained.*

Near Latitude 41° 27'.9, Longitude 71° 09'.9 the charted depths, two 8 foot spots, an 18 and an 11, were searched for but no trace was found of any of them. Probably a wire drag will be required to find these if they are still there. The same is true of the charted 18 foot spot at Latitude 41° 28'.15, Long. 71° 09'.4.

The upper 8 ft on the chart is erroneous. Should be 18 ft. on H.1791

The lower 8 ft. sdg. on the chart was found inaccurately plotted on H. 1791 as mentioned is

The first 18 ft. sdg. inaccurately plotted on H.1791. Should have been 30 ft. in stead, agreeing with H.5553.

The 11 ft sdg appears to be OK & is being carried forward in red

COMPARISON WITH PREVIOUS SURVEYS (continued)

At Latitude 41° 28'.15, Longitude 71° 09'.37, a charted depth of 18 feet was searched for but no trace of it was found. Development insufficient to disprove the 18, which has been retained.

Recommended for retention of 18 ft Sdg. See Review.

At Latitude 41° 28'.28, Longitude 71° 09'.25, a charted depth of 17 feet was searched for. Least depth found was 23 feet. Development insufficient to disprove the 17, which has been retained.

Recommended for retention of 17 ft Sdg. See Review

At Latitude 41° 26'.65, Longitude 71° 09'.53, on Elisha Ledge, the charted 13 foot spot was found. This is small in area, a regular pinnacle. The ten fathom curve in this area is now located materially different from that shown on the chart.

Respectfully submitted,

Daniel S. Ling

Daniel S. Ling, Surveyor.

Approved:

Wm. D. Patterson.

Wm. D. Patterson, Lieut.,
Chief of Field Party No. 5.

ADDITIONAL NOTES BY CHIEF OF PARTY TO ACCOMPANY

HYDROGRAPHIC SHEET NO.3 (Field Number)

VICINITY OF SAKONNET POINT, RHODE ISLAND.

****

DATUM

The sheet is on the North American 1927 datum as are the topographic sheets surveyed this year. All triangulation executed this year was computed on the North American 1927 datum. Old stations, not relocated this year, which were used on these sheets were plotted by applying the linear correction determined this year between the new and old datums. This correction as applied to the old stations in this vicinity is minus 16.8 meters in latitude and plus 2.6 meters in longitude.

WIRE DRAG WORK

All charted shoals and rocks within the limits of this survey were carefully searched for. In many cases the least depth as obtained by previous surveys was not found. On account of the extremely rocky nature of this area we would be unable to state that the previous depths do not exist without a wire drag examination. Due to the prevailing bad weather and the lateness of the season it is doubtful if we will be able to do any wire drag work.

SAKONNET HARBOR

Affords little protection except with southerly or easterly winds. Small craft usually anchor off the wharves. There is a depth of 5 feet at the end of the wharf on the eastern side of the harbor. The "V" shaped wharf at the westerly side of the harbor has a depth of 8 feet at the apex with the depth gradually shoaling to 3 or 4 feet near the head of the wharf, the best water being found on the eastern side.

Respectfully submitted,

Wm. D. Patterson

Wm. D. Patterson, Lieut.,
Chief of Field Party No. 5.

STATISTICS

HYDROGRAPHIC SHEET NO. 3 (Field Number)

VICINITY OF SAKONNET POINT, RHODE ISLAND.

****

DATE 1934		DAY LETTER	VOLUME	NUMBER OF POSITIONS	NUMBER OF SOUNDINGS	NUMBER OF STATUTE MILES
Aug.	22	A	1	58	270	16.8
"	23	B	1	103	381	26.0
"	24	C	1	38	140	4.0
"	25	D	1	93	332	23.4
"	27	E	1	114	372	25.5
"	28	F	2	67	202	9.6
"	29	G	2	86	324	17.4
"	30	H	2	92	353	10.3
"	31	J	2	61	241	4.7
Sept.	6	K	2	74	319	15.4
"	10	L	3	61	275	7.6
"	11	M	3	58	224	7.6
Oct.	2	N	3	40	153	4.0
"	3	P	3	33	64	5.1
"	4	R	3	7	24	1.1
"	9	S	3	31	118	3.1
"	10	T	3	105	318	8.1
"	11	U	3	48	151	4.0
Totals		18	3	1169	4261	193.7

Area - 11.2 square statute miles.

LAC

December 1, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

E. P. Ellis

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5553

Locality Vicinity of Sakonnet Point, Rhode Island

Chief of Party: W. D. Patterson in 1934
Plane of reference is mean low water, reading
0.5 ft. on tide staff at Sakonnet Harbor
10.7 ft. below B.M. 1

1.8 ft. on tide staff at Westport Harbor
6.5 ft. below B.M. 1

Height of mean high water above plane of reference is 3.3 feet at

Sakonnet Harbor; 3.1 feet at Westport Harbor.

Condition of records satisfactory except as noted below:

Paul P. Whitney

~~Acting~~ Chief, Division of Tides and Currents.

To: Mr. Bacon
From L. S. S.

Date. Dec. 3, 1934

GEOGRAPHIC NAMES

RHODE ISLAND

Survey No. H 5553
T 6118

Chart No. 1210 & 353

Diagram No. 1210-3

Names underlined in red approved Dec. 11, 1934
H Bacon

*, Approved by the Division of Geographic Names, Department of Interior.

¢, Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Sakonnet Point	Same			
	Warren Point	"			
	Schuyler Ledge	" Name near 8 ft. spot.			41° 26.5 71° 11.8
	Elisha Ledge	"			41° 26.6 71° 09.5
	Dolphin Rock	"			41° 27.2 71° 11.1
	Halfway Rock	"			41° 28.4 71° 08.6
	Cullywaugh Rooks	"			41° 27.5 71° 10.2
	Sakonnet Harbor	"			
	Add				
	Briggs Point	353 GN Stand. & Official Gazatteer of R.I.		1/5/37 GHF	
		See GN 2 (1937)			

(M 100)

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5553

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	1169 ~~1261~~
Number of positions checked	63
Number of positions revised	1
Number of soundings recorded	4261
Number of soundings revised	165
Number of signals erroneously plotted or transferred	0

Date: Feb. 11 -1935

Verification by C. STANLEY · LIGHTBOWN Time: 35 hrs.

Review by S. Risegari Time: 74 3/4 hrs.

FEB - 9 - 1935

Verification Report on H5553 - (1934)

Chief of party Wm. D. Patterson
Surveyed August - October 1934
Surveyed by Daniel S. Ling
Protracted by J. C. Mc Illwain
Soundings by " " "
Verified and inked by C. Stanley Lightbown

1. The records conform to the requirements of the General Instructions except that in column "Angles + Ranges" the positions numbers were misplaced and not opposite position numbers on other page, this caused some confusion in setting angles on protractor.
2. The usual depth curves were completely drawn

3. The field plotting was completed to the extent prescribed in the Hydrographic Manual

4. The field draftsman failed to underline "WAR" for (a) station name taken from WARREN. also he underlined "BIG" instead of "ROC" for station name taken from BIG ROCK.

(b) Ten rocks awash shown on Topo sheet 6118 were not shown on smooth sheet.

(c) Position 11 sday, a sounding on top of a submerged (6ft) rock in an area of 25-30 feet of water was plotted 150 meters off correct location. The corrected location agreed with boat sheet + records. (Lat Long)

(d) In a great number of instances the smooth plotter fail to show shoaler soundings at crossings

(e) Of one hundred sixty five revisions to soundings sixty five were necessary because the smooth plotter had copied soundings wrong from records or had put in an extra sounding between positions in which case the time interval was wrong and hence all soundings between positions were in the wrong location

The reverse of this occured in one instance, that is leaving out one sounding and dividing space between positions erroneously.

The errors or omissions as listed above were corrected and done over by the office draftsman.

5 No junctions were made with contemporary sheets as the only one registered H 5622 (1934) had not been verified.

6 The notes under "Comparison with Previous Surveys" in descriptive report were not taken into consideration by the verifier except on depths found to compare with records.

The recommendations of the field party were left to the disposition of reviewer and compiler.

(One longitude line ~~w~~ numbered wrong. By field draftsman)

Respectfully Submitted

Stanley Lightbourn

All records received, as required, except

Recoverable stations (Some listed in this general locality under T 6116-6117)

Charts for Lighthouse service.
Landmarks for Charts.
Field Examinations

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5553 (1934)

Vicinity of Sakonnet Pt., Buzzards Bay, R. I.
Instructions dated May 14, 1934,
Supplemental Instructions dated July 11 and 31, 1934 (W. D. Patterson)

Hand Lead Soundings — 3 Point Control on Shore Signals

Chief of Party - W. D. Patterson.
Surveyed by - D. S. Ling.
Protracted by - J. C. McIlwaine.
Soundings penciled by - J. C. McIlwaine.
Verified and Inked by - C. S. Lightbown.

1. Condition of Records.

The records conform to the requirements of the Hydrographic Manual except as follows:

> The position numbers were not placed opposite the name of the right-hand object in the "angle" column of the sounding records, as is customary.

This inconsistency is confusing, particularly when one or more sets of signals are not separated by a space.

2. Compliance with Instructions for the Project.

The survey complies with the instructions for the project except that a number of the charted shoal soundings from old surveys were not examined. (Par. 10 instructions of July 11, 1934).

3. Sounding Line Crossings.

Agreement of depths at crossings and adjacent lines are satisfactory.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including most of the 6 foot curve.

5. Junction with Surveys.

a. H-3995 (1917).

The junction in the Sakonnet River with this survey is very satisfactory.

b. H-4006 (W. D. Survey) 1917.

A satisfactory junction on the west and south has been effected with this wire drag survey.

c. H-5622 (1934).

The junction on the east with this survey will be considered in the review of that sheet.

6. Comparison of Prior Surveys.

a. Misc. No. 20 (1832).

Only a few soundings of this survey fall within the area of the present work, and none of them contribute any feature worth carrying forward.

b. H-153 (1844).

This old survey has sounding lines widely spaced but in general where a comparison can be made there is fair agreement. There is no feature on the survey that is outstanding that has not been covered by the present survey.

c. H-154 (1844).

This survey is of the same type as H-153 (1844). There is nothing outstanding that has not been covered by the present survey, with the following exception:

Two charted 60 foot sounding lat. 41°26.4', long. 71°10.8' when transferred to the present survey fall near a 68 and a 62 foot soundings, respectively. A comparison of the depths here between the two surveys shows that a general uniform deepening in this area has occurred; these soundings represent the general depths and are not isolated shoal spots on H-154 (1844). The two 60 foot soundings should be disregarded in future charting.

d. H-205 (1848).

This survey covers only a small part of the present survey and contributes no additional information.

e. H-1787 (1887).

This survey covers only a small portion of the present survey with sounding lines which are widely spaced and which show in general, a good agreement with the present survey.

A sounding of 45 feet (uncharted) in lat. 41°27.05', long. 71° 14.2', is the only important sounding for consideration. It was not brought forward because it falls adjacent to a 44 foot sounding from H-1791 (1887).

f. H-1791 (1887).

This survey covers practically the same area as the present work and is an exceptionally good survey.

A comparison shows that a general deepening has taken place at the entrance to Sakonnet River, extending the sixty foot curve farther up the river.

In other portions of the surveys the soundings are in a general good agreement with the exception of a number of shoal spots not found by later surveys. These shoal spots have all been carried forward to the present survey and the most important are discussed in the following paragraphs:

(1) The 44 foot rocky bottom sounding (charted) in lat. 41°27.05', long. 71°14.2' is the shoalest of four leadline drift soundings taken over the position. This is the least depth found by four different surveys, H-1787 (1887), H-1791 (1887), H-4006 (W. D.) (1917), and H-5553 (1934). H-4006 (W. D.) (1917) failed to drag this area but obtained a leadline sounding of 46 feet. The 44 foot sounding should be retained on the chart, and has been carried forward to H-5553 (1934).

(2) A 34 foot sounding, lat. 41°26.83', long. 71°12.1', not charted, falls among soundings of from 38 to 49 feet on the present survey. The records were inspected and the line of soundings checked. This sounding is being carried forward in red on the present survey.

(3) A charted 33 foot sounding, lat. 41°26.52', long. 71°11.5' is between a 47 and a 49 foot sounding on H-1791 (1887). The sounding falls in depths of 43 to 52 feet on the present survey. The records show this sounding correctly reduced and plotted. The 33 foot sounding has been carried forward in red on the present survey.

(4) A 40 foot sounding, lat. 41°26.8', long. 71°11.35', not charted, is a shoal spot between a 48 and a 49 foot sounding on H-1791 (1887), and falls among soundings of 48 to 51 feet on the present survey. This sounding has been carried forward in red on the present survey.

(5) A 41 foot sounding, lat. 41°26.8', long. 71°10.8', not charted, is a shoal sounding between a 52 and a 55 foot sounding on H-1791 (1887). It falls among depths of 54 to 59 feet on the present survey. This sounding has been carried forward in red on the present survey.

(6) A 44 foot sounding (uncharted) in lat. 41°27.6', long. 71° 09.05' is between a 49 and a 50 foot sounding on H-1791 (1887). It falls in an area surrounded by soundings of 52 feet and over on the present survey. It has been carried forward in red on the present survey.

(7) A 36 foot sounding (uncharted) in lat. 41°27.63', long. 71° 09.75' falls in depths of about 40 feet on the present survey. It has been carried forward in red on the present survey.

(8) Two 32 foot soundings (uncharted) in lat. 41°28.25', long. 71°08.8' fall among soundings of 36 feet and over on the present survey.

These soundings have been carried forward in red on the present survey.

(9) A 29 foot sounding (charted) in lat. 41°28.35', long. 71° 08.5' plots between two 42 foot soundings on H-1791 (1887). It falls between a 41 and a 45 foot sounding on the present survey.

There is a 28 foot sounding 70 meters southeastward on the present survey and it is possible the 29 foot sounding was not well located, although an inspection of the old records shows no discrepancy.

The 29 foot sounding has been carried forward in red to the present survey. It should be replaced on the chart by the 28 foot sounding slightly further offshore on the present work.

(10) A charted 17 foot sounding, lat. 41°28.3', long. 71°09.2' plots among deeper soundings on the old survey and falls among soundings of 31 feet and over on the present survey. The field party of the present survey investigated this area and the least sounding found was 28 feet. The old records were inspected and no discrepancy was found.

The bottom here is generally rocky and the depths very irregular. In view of the fact that the present field party used no drag and did not resort to drift soundings, the 17 is not considered disproved and should be retained on the chart. It has been carried forward to the present survey.

(11) A charted 18 foot sounding, lat. 41°28.1', long. 71°09.4', appears as a shoal spot between a 30 foot and a 41 foot sounding on H-1791 (1887). It falls between a 37 and a 39 foot sounding on the present survey. The field party of the present survey investigated this area, but since they did not feel around with the lead, the development is considered insufficient to disprove the 18 which has been carried forward and should be retained on the chart.

(12) A charted 8 foot sounding, lat. 41°27.95', long. 71°10', was found to be erroneous. The old records show this sounding to be 18 feet instead of the 8 feet shown. As an additional check, all lines in this particular area were carefully investigated and no such shoal sounding was found to exist.

The 8 should be disregarded in future charting.

(13) Another charted 8 foot sounding, lat. 41°27.9', long. 71° 10', was found to be incorrectly plotted from the old records. The party of the present survey searched this area but found the least depth to be about 20 feet, which agrees with soundings of the replotted line of H-1791 (1887). The 8 foot spot should be disregarded in future charting.

(14) A charted 22 foot shoal spot, lat. 41°28.0', long. 71°09.76', falls between a 33 and a 36 foot sounding on H-1791 (1887) and falls between corresponding depths on the present survey. Inspection of the old records showed no discrepancy. The sounding has been carried forward in red on the present survey and should be retained on the chart.

(15) An 18 foot sounding (charted), lat. 41°27.09', long. 71°09.9', was found to be erroneously plotted on the old survey. The 18 should have been plotted as 30 feet on H-1791 (1887). The field party of the present survey investigated this area and the least depth found was 31 feet. The 18 foot spot should be disregarded in future charting.

(16) A charted 11 foot sounding lat. 41°27.75', long. 71°09.9', is recorded in the old records at position 4d (blue).

Indication that a shoal exists here is evidenced by another line of soundings on the old survey, pos. 7d to 8d, where the shoalest depth found over the area was 23 feet between two 29 foot soundings.

The field party of the present survey could not find this depth, the shoalest found being 26 feet. Since no drag was used or drift soundings resorted to, the 11 foot sounding is not considered disproved. It has been carried forward and should be retained on the chart.

(17) A charted 9 foot sounding, lat. 41°27.58', long. 71°10.0', is recorded in the old records at position 16d (blue). It falls among depths of 13 and 14 feet on the present survey. This sounding has been carried forward in red on the present survey and should be retained on the chart.

(18) A 2 foot sounding (uncharted) in lat. 41°27.46', long. 71° 10.3', is recorded in the old records at position 68c (blue). It falls close to a 23 foot sounding on the present survey. Though no investigation of this sounding was made, an 11 foot sounding was obtained 40 meters southwest of it. The 2 foot sounding has been carried forward in red on the present survey.

(19) A charted 10 foot sounding, lat. 41°27.4', long. 71°10.45', was not investigated by the field party of the present survey. This sounding was found in the old records at position 22l (blue) with a notation "top of rock" and is further corroborated by a 11 foot sounding at position 35h (red). The sounding falls just outside the 5 fathom curve on the present survey.

The 10 has been carried forward in red and should be retained on the chart.

(20) The charted 16 foot sounding on Dolphin Rock, lat. 41°27.23', long. 71°11.15' was found in the old records in position 19a (Addl. Work). This sounding was investigated by the present survey party by drift soundings and 17 feet was the least depth obtained. As suggested by the field party the highest peak may not have been sounded and therefore the 16 foot sounding has been carried forward on the new survey and should be retained on the chart.

(21) The charted 26 foot sounding southeast of Dolphin Rock in lat. 41°27.11', long. 71°11.10', falls adjacent to a 29 foot sounding on the present survey, which was the least depth obtained. The field party's recommendation that the 26 be retained is concurred in, and it has been carried forward to H-5553 (1934).

(22) A charted 3 foot sounding lat. 41°26.84', long. 71°11.6', was not investigated by the present field party and falls among soundings of 22 feet and over.

The old records show the shoal spot was definitely located with soundings taken over it and only the least depth found was recorded. The sounding has been carried forward in red on the present survey and should be retained on the chart.

(23) A charted 15 foot sounding, lat. 41°26.85', long. 71°11.78', is from this survey (between position 8a and 9a (blue), and falls among soundings of 20 feet and over on the present survey. The sounding has been carried forward in red on the present survey and should be retained on the chart.

(24) A charted 16 foot sounding, lat. 41°26.78', long. 71°11.64', was found in the old records between position 14c and 15c (blue).

This sounding was not investigated by the field party of the present survey and falls among deeper soundings, of which 38 is the shoalest. There is an indication of a shoal here evidenced by the character of two other sounding lines on the old survey over the spot. The 16 has been carried forward in red on the present survey and should be retained on the chart.

(25) Three 14 foot soundings, two of which are charted, lat. 41°26.78', long. 71°11.9', were not investigated by the field party of the present survey. They fall among soundings of 31 feet and over on the present survey.

These soundings are in the old records between positions 6m and 7m (blue) and between 8c and 9c (blue).

The soundings were found to be correctly plotted and reduced and have therefore been carried forward in red on the present survey, and should be retained on the chart.

(26) The least depth (8 feet) charted over Schuyler Ledge (lat. 41°26.5', long. 71°11.8') was verified by the present survey, however some of the surrounding depths were not found. The field party state that they may have missed some of the other shoal points of the ledge and recommend the retention of the soundings from the old surveys. For this reason all of the shoaler depths have been added to the present survey and should be retained on the chart.

(27) The charted 13 foot rock at Elisha Ledge (lat. 41°26.65', long. 71°09.53') was found and the same depth obtained.

(28) A number of other soundings of lesser importance have been carried forward to the present survey from H-1791 (1887) but have not been specifically mentioned in this review. Any of these soundings may be used for charting.

g. H-1788 (1887).

This survey covers only a small portion of the southeastern edge of the present survey, with sounding lines which are widely spaced. Where a comparison can be made with the present work, the two surveys are generally in good agreement. There are no outstanding features on the sheet worth carrying forward in the area concerned.

h. H-1443 (1879).

This survey is a development of Schuyler Ledge. The 8 foot sounding shown in the old survey was checked by the present survey. A 17 foot sounding falls very close to a 19 foot (charted) sounding shown on H-1791 (1887), but neither of these depths were found on the present survey. The 17 foot sounding is being carried forward in blue on the present survey and should replace the 19 on the chart.

i. H-4006 (1917).

All soundings of this wire drag survey have been transferred to the present survey in green and in nearly every case plot among much deeper soundings.

j. H-3668 (1914).

This wire drag survey barely overlaps the eastern limit of the present survey but none of the shoals found by the drag fall within the area of the present survey.

7. Comparison with Chart No. 353.

a. Within the area of the present survey, the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

b. Aids to Navigation.

(1) The horizontal stripe buoy marking Elisha Ledge was located approximately 70 meters east of its charted position.

(2) Bell buoy No. 2, off Schuyler Ledge, was located approximately 330 meters in a southerly direction from the charted position. Its new position is in deeper water and its effect would be to keep vessels farther away from the ledge, however boats attempting to pass between the buoy and the shoal area to the northward would be in danger of striking on Schuyler Ledge.

(3) Bell buoy No. 1, S. S. E. of Cormorant Rock, was located in substantially the same position as charted.

8. Field Plotting.

Protracting of positions was satisfactory but the plotting of soundings was only fairly well done. The verifier of this sheet reports a number of soundings were erroneously copied from the records and also reports in a number of cases more soundings were plotted on the sheet than were recorded between positions. At crossings in a large number of cases the shoaler sounding was not plotted by the field party and had to be added by the verifier.

For results of these investigations see descriptive report and review of the Additional Work of 1935.

9. Additional Field Work Recommended.

Because of the irregular character and bouldery nature of the bottom, the entire area covered by the present survey should be wire dragged as close inshore as possible. If such drag survey is not feasible, then the following more important shoals and indications originating with either the old or new surveys should have additional lead line development supplemented by drift soundings. The shoals listed do not include those shoals that were adequately developed on the old survey or that were corroborated by shoalings on the new survey or that were drifted over on the new work.

a. The 17 foot sounding and vicinity (from H-1791, 1887) in lat. 41°28.3', long. 71°09.2'. (See par. 6 f (10)).

Par. 3a review of additional work of 1935

b. The 11 foot sounding (charted)(from H-1791, 1887) in lat. 41° 27.75', long. 71°09.9'. (See par. 6 f (16)).

Par. 3b review of additional work of 1935

c. The three 14 foot soundings (from H-1791, 1887) in lat. 41°26.78', long. 71°11.9' (see par. 6 f (25)) and a 16 foot sounding (from H-1791, 1887) east of them (see par. 6 f (24)).

See H-8366

Par. 3c review of additional work of 1935

d. The 44 foot sounding (rocky bottom) (from H-1791, 1887) in lat. 41°27.05', long. 71°14.2' (par. 6 f (1)).

See H-8366

Par. 3d review of additional work of 1935

e. The 34 foot Rk sounding (from present survey) in lat. 41°28.06', long. 71°08.9', present survey.

Par. 3e review of additional work of 1935

10. Location of Rocks.

A rock awash was located by the topographic party (T-6118 (1934)) in lat. 41°27.45', long. 71°10.74'. A rock awash, 70 meters south of the above rock, was located by the hydrographic party (H-5553 (1934)). If there were actually two different rocks, it is not clear why the topographer saw one and not the other. The two rocks in lat. 41°27.0', long. 71°11.59' were also located in this manner. There is some doubt in both cases as to whether two rocks exist, as it is noted that the boatsheet shows only one rock in each case. This matter has been referred to the field party and should be settled in conjunction with the additional work requested.

Par. 3f and par. 3g review of additional work of 1935

11. Superseding Old Surveys.

Within the area covered, the present survey, with the indicated additions from previous surveys, supersedes the following surveys for charting purposes:

Miscellaneous No. 20	(1832)	In Part.
H-153	(1844)	In Part.
H-154	(1844)	" "
H-205	(1848)	" "
H-1791	(1887)	" "
H-1787	(1887)	" "
H-1788	(1887)	" "
H-1443	(1879)	Entirely.

12. Reviewed by-G. Risegari and R. L. Johnston, March 15, 1935.

Inspected by - A. L. Shalowitz.

See addenda to this Review. (attached To Add. Work)

Examined and approved:

C. K. Green, C. K. Green
Chief, Section of Field Records.

L. O. Colbert
Chief, Division of Charts.

Jack S. Borden
Chief, Section of Field Work.

J. Wade
Chief, Division of H. & T.

applied to drawing of Chart 237 - June 17, 1935 - JFW

25 Jan 13, 1936
E.W.S.

5553a Additional work (1935)
WIRE DRAG SURVEY.

5553a Additional work (1935)
WIRE DRAG SURVEY.

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, *Director*

State: Rhode Island.

DESCRIPTIVE REPORT

~~Topographic~~ *Hydrographic* } *Sheet No.* 5553 5553 add'l Work (1935)

LOCALITY
Buzzards Bay
Vic. of Sakonnet Point

1935

CHIEF OF PARTY

Wm. D. Patterson, Lieut.

U. S. GOVERNMENT PRINTING OFFICE: 1933

WIRE DRAG SURVEY.

Form 537
Ed. Dec., 1930

REG. NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. S

REGISTER NO. 5553 5553 add'l Work(1935)

State Rhode Island

General locality ~~Outer coast.~~ Buzzards Bay

Locality Vic. of Sakonnet Point.

Scale 1:10,000 Date of survey June - July, 1935

Vessel Field Party No. 5.

Chief of Party Wm. D. Patterson

Surveyed by D. S. Ling and G. F. Jordan, Surveyors.

Protracted by JamcCormick

Soundings penciled by J.A. mc Cormick

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by JamcCormick

Verified by JamcCormick

Instructions dated May 14, 1934 and S.I. July 11 & 31 1934

Remarks: Additional work on this sheet done in 1935
To be plotted in Washington, Office.

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET NO. 5553 add'l Work (1935)
1934

VICINITY OF SAKONNET POINT, RHODE ISLAND.

Additional Work
1935

Field Party No. 5 Project HT-179 Wm. D. Patterson, C. of P.

DATE OF INSTRUCTIONS

Director's Instructions dated May 14, 1935 and Supplemental Instructions dated July 11 & 31, 1934.

SCOPE OF WORK

The work consisted of additional development of shoals as directed by the Office Review of the Smooth Sheet dated Mar. 15, 1935, and as indicated on a bromide of the Smooth Sheet furnished the party. This bromide is being returned to the office with the boat sheet of this year.

RECORDS

The records of 1935 consist of a Sounding Record (No. 4), a Wire Drag Record, a Boat Sheet, and the Bromide mentioned above. The additional work accomplished is to be plotted on the smooth sheet of 1934 in the Washington office.

SIGNALS

The signals used and the names given them are the same as those now appearing on the Smooth Sheet in the Washington office. No new signals were used or established. The signals are all listed on the cover page of Vol. 1, 1934.

SURVEY METHODS

The work consisted of leadline and wire drag examination of shoals to determine least depth. Very few lines of soundings were run. When feeling for least depth by leadline, a buoy was placed on the shoal and the boat allowed to drift repeatedly over the shoal with three leadlines in contact with the bottom until least depth was found.

WIRE DRAG

A portable wire drag was used to investigate shoal areas. It was intended to drag several areas and work was begun on July 30th. However, on July 31st a telegram was received from the Director ordering the disbandment of the party and further work was prevented.

The one days drag work is shown on the boat sheet. This was for the purpose of investigating the 44 foot bank in lat. 41° 27.0' long. 71° 14.3'. Due to an error in identifying a signal (observed ⊙ Wes for △East) the drag did not cover the area as intended. However, the 44 foot spot was covered with an effective depth of 40½ feet. This area would have been dragged again but for the sudden close of field work.

SHOALS INVESTIGATED

The 17 foot sounding and vicinity (see par. 9a of the office Review of smooth sheet) in lat. 41°28.3', long. 71° 09.2' was not found. A 25 foot rock was found 60 meters S.W. of the charted 17 foot spot (pos. 21A), and a 10½ foot rock 90 meters to the south (pos. 19A). This area is very rocky with small pinacles, and unless the old records are doubtful, it is believed that the 17 foot sounding should be retained. The 10½ foot rock was visible and the least depth obtained.

See par. 3a of this review

The 11 foot sounding (par. 9b of the Review) in lat. 41° 27.75', long. 71° 09.9' was investigated and a least depth of 10½ feet found (pos. 24A). The rock was visible and the least depth determined.

See par. 3b of this review

The three 14 foot soundings (see par. 9c of the Review) in lat. 41° 26.78', long. 71°11.9', and a 16 foot sounding east of them were investigated as follows:- The 16 foot sounding was found with a least depth of 16 feet (pos. 46B), The three 14 foot soundings were found with 14½ feet (pos. 5C), 14½ feet (pos. 3C), and 12½ feet (pos. 1C), respectively. The 28 foot sounding to southward was found with a least depth of 27½ feet (pos. 42B). Some additional lines of soundings were run in this vicinity.

See par. 3c of this review

The 44 foot sounding (par. 9d of the Review) in lat. 41° 27.05', long. 71° 14.2', was investigated by Wire Drag and described under that heading, preceeding. Additional soundings were thought to have been taken on this shoal (D day), but an error in identifying a signal places the soundings off the shoal and the work is rejected.

See par. 3d. of this review

The 34 foot Rk. sounding (par. 9e of the Review) in lat. 41° 28.06', long. 71° 08.9', was investigated (pos. 1 to 17 A) and a least depth found of 31½ feet (pos. 14 A).

See par. 3e of this review

The rock awash (par. 10 of the Review) in lat. 41° 27.45', long. 71° 10.74' was examined and found to be only one rock in this vicinity (pos. 26 & 27 A). It is probable that the topographer took cuts to breakers at high water and consequently located the rock too far inshore. The rock is large in area.

See par. 3f of this review

The two rocks (par. 10 of the Review) in lat. 41°27.0', long. 71° 11.59' were both found in position. This is a rocky ledge consisting of two large rocks with numerous smaller ones between.

See par. 3g of this review

REMARKS

Field work on this sheet was completed except that the Chief of Party desired to drag certain areas but was prevented by the sudden close of the field work.

The area is very rocky, with numerous pinacles and boulders, and it would be a very lucky coincidence if any party found all the least depths in one season. Charts of this area should be made from the latest surveys with the addition of all unquestionable lesser depths from previous surveys.

Respectfully submitted,

Wm. D. Patterson

Wm. D. Patterson,
Lieut. C. & G. Survey,
Chief of Field Party No. 5.

STATISTICS

HYDROGRAPHIC SHEET NO. 5553
Add'l Work
1935

DATE	DAY LETTER	VOLUME	NO. OF POSITIONS	NO. OF SOUNDINGS	NO. OF STATUTE MILES
June 14	A(blue)	4	27	46	0.8
June 17	B	4	46	132	4.6
July 24	C	4	7	7	0.0
Totals			80	185	5.4
			WIRE DRAG		
July 30	A	1	14	0	1.4

RAC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

September 23, 1935

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
2 volumes of sounding ~~records for~~ and wire drag records for

HYDROGRAPHIC SHEET 5553add'l Work (1935)

Locality Vicinity of Sakonnet Point, Rhode Island

Chief of Party: Wm. D. Patterson in 1935
Plane of reference is mean low water reading
3.7 ft. on tide staff at Westport Harbor
6.4 ft. below B.M. 1
1.1 ft. on tide staff at Clark Point
10.6 ft. below B. M. 1

Height of mean high water above plane of reference is 3.1 ft. at Westport Harbor; 3.7 feet at Clark Point.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5553 add'l Work (1935)

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	94
Number of positions checked	83
Number of positions revised	.....
Number of soundings recorded	185
Number of soundings revised	.....
Number of signals erroneously plotted or transferred	0

Date: Oct. 29, 1935

Verification by James Connick Time: 8 hr.

Review by P L Johnston Time: 13¼ hr

Verifier's Report on H-5553 Add. Work (1935)

Records:

Records are complete

Drafting:

Boatsheet only was submitted by field party. Verifier plotted additional work on smooth sheet.

Remarks:

Pos. 23 A (blue) falls about 15 meters SW of Pos. 49 M (red). Note on record says it is the same rock. Verifier did not change the 1934 location. Lat. 41-28.1 Long. 71-09.4. Stronger fix at pos 49 M (red) 1934. Old position retained R.D.

Curves on 24 and 25 A (blue) were left open for action of reviewer as regards soundings from H-1791. Lat. 41-27.7 Long. 71-09.9. See par 36 of this review

Rock located by positions 26-27 A (blue) has not been noted by verifier. Lat. 41-27.5. Long. 71-10.7. The most southerly of two rocks shown by 1934 work is noted as being midway between positions 47-48 L (red) This is evidently the same rock as located between 26-27 A (blue). The 1934 location seems to be the best. The most northerly of the two rocks shown is from T-6118 (1934) and, according to the field party, should be deleted. The 1935 location of the southerly rock would show it as baring 2 ft. at MLW while the 1934 location shows it awash at MLW. Rock plotted as bare 1 foot at M.L.W. which is a mean of the two estimates. See par 34 for other dispositions.

Curves have been left open at Lat. 41-26.8 Long. 71-11.8 for action of reviewer as regards soundings transferred from H-1791.

The drag strip was transferred from the boat sheet to an overlay which accompanies this report. Overlay was then placed on the smooth sheet and the strip was verified at critical points. 44 foot spot is barely covered by the drag.

Oct. 29, 1935 Submitted,

James Cornick

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5553 Add'l. Work (1935) FIELD NO. 3.

Vicinity of Sakonnet Point, Buzzards Bay, Rhode Island
Surveyed in June - July 1935
Instructions dated May 14, 1934 (W. D. Patterson)
Supplemental Instructions dated July 11 and 31, 1934 (W. D. Patterson).

Wire Drag and Hand Lead Soundings. 3 Point fixes on shore signals.

Chief of Party - W. D. Patterson.
Surveyed by - D. S. Ling, G. F. Jordan.
Protracted and plotted by - J. A. McCormick.
Verified and inked by - J. A. McCormick.

1. Purpose of Survey.

The purpose of the additional work of 1935 was to further investigate shoal indications originating both from prior surveys and the season's work of 1934, and to clear up discrepancies between the topographic and hydrographic locations of rocks in 1934. These were noted in par. 9 and 10 of the original review of H-5553 (1934).

2. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

The Descriptive Report is clear and comprehensive and adequately covers all matters of importance.

3. Results of Survey.

Practically all of the investigations called for in the original review resulted in a verification of the shoals carried forward to the 1934 work from prior surveys. In addition, less water was found in several cases. The various soundings involved in the new examinations have been disposed of as follows:

a. The 17 foot sounding and vicinity in lat. 41°28.3', long. 71°09.2', (See par. 6 f(10) and par. 9a of the original review) was investigated by drift soundings and not found. However, this examination resulted in finding a new 10-1/2 foot rock about 90 meters south of the 17, as well as a 25 foot rock about 60 meters southwest. In view of these findings, the 17 foot sounding is no longer of great importance. However, it has been retained since the field party reports there are numerous small pinacles in this area and they do not believe the old 17 was definitely disproved.

b. The 11 foot sounding (see par. 6f (16) and par. 9b of the original review) in lat. 41°27.75', long. 71°09.9', was investigated and a least depth of 10-1/2 feet found. The new position is approximately 30 meters southeast of the old 11. However, the new position has been accepted since it was located by two strong fixes when the peak of the rock was visible. The 11 foot sounding has been removed from the sheet and should be replaced on the chart by the new 10 foot rock.

c. The three 14 foot soundings (par. 6f (25) and par. 9c of the original review) in lat. 41°26.78', long. 71°11.9', and a 16 foot sounding (par. 6f (24) and par. 9c of the original review) east of them were all verified and a new 12-1/2 foot rock located.

d. The 44 foot rocky bottom sounding, (par. 6f (1) and par. 9d of the original review) was investigated by wire drag. Due to an error in identifying a signal (observed topographic signal Wes for triangulation station East) the drag did not cover the entire area intended. However, the 44 foot spot was cleared with an effective depth of 40-1/2 feet. Part of the area not covered was cleared by the wire drag with depths over 40 feet in 1917. (H-4006). The 44 foot sounding should be retained on the chart. see H-8366

e. The 34 foot RK sounding (par. 9(e) of the original review) in lat. 41°28.06', long. 71°08.9', from the season's work of 1934, was investigated by drift soundings. The least depth on this spot was found to be 32 feet. An additional spot with a least depth of 31-1/2 feet was found about 100 meters to the northward in depths of 45 feet. The examination disclosed the possible existence of a narrow rocky ledge in this vicinity. The 34 foot sounding of the 1934 work has been removed from the sheet and replaced by a 32 from the additional work.

f. The investigation to determine if there was actually one or two rocks at lat. 41°27.45', long. 71°10.64' (see par. 10 of the original review) showed that only one rock existed. The hydrographic location was verified (pos. 47 and 48 L in 1934 records and pos. 26 and 27 A in 1935 records) and the position shown on T-6118 (1934) proved erroneous. The rock awash shown on T-6118 (1934) has been removed from that sheet and should also be removed from chart No. 237 (in stage of construction).

g. The two rocks awash (par. 10 of the original review) in lat. 41°27.0', long. 71°11.59', one of which originates with T-6118 (1934), were investigated. Both of these rocks were found in the positions shown.

4. Field Plotting.

The additional work of 1935 was plotted on the smooth sheet in the Washington office. The drag work was not plotted on the smooth sheet because it was done merely for the purpose of supplementing the hydrographic work and not as a general drag survey of the area. The drag strip has, however, been plotted on a piece of vellum which is attached to this Descriptive Report.

5. Additional Field Work Recommended.

Only a portion of the contemplated drag work in connection with these investigations was done, due to the sudden disbanding of the field party. In spite of this all of the examinations requested in the original review have been satisfactorily accomplished, generally by drift soundings, except as mentioned in par. 3d of this review. No additional sounding work is considered necessary, but on account of the irregular character and bouldery nature of the bottom, the entire area of the present survey should be wire dragged at some future time.

6. Note to Compiler.

Attention is called to the fact that H-5553 (1934) was applied to chart No. 237 (in stage of construction) before the additional work of 1935 was received. The appearance of the sheet before the additional work was plotted may be seen by referring to the accompanying bromide, on which the areas containing the additional work are encircled in red. The compiler should note that an 11 foot sounding, a 34 foot sounding, and a rock awash symbol have been removed from the sheet (par. 3b and 3e, and 3f of this review).

7. Reviewed by - R. L. Johnston, Nov. 19, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green,
Chief, Section of Field Records.

L. O. Colbert
Chief, Division of Charts.

Chief, Section of Field Work.

Chief, Division of H. & T.

Addenda to Review of H-5553 (1934-5)

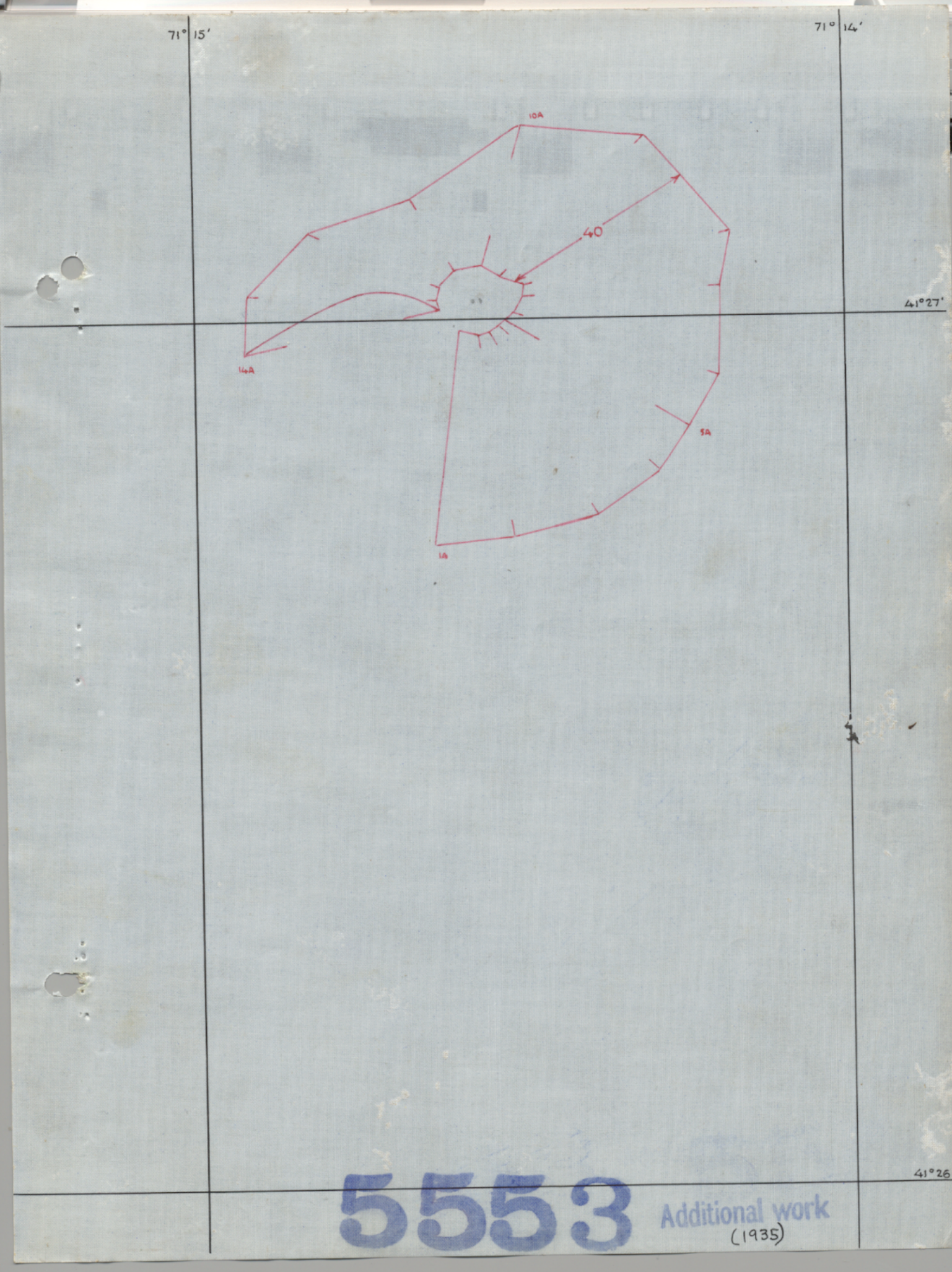
Changes in Shoreline & Rocks.

The comparison of air photo compilation T-5601 (1934) with plane table survey T-6118 (1934) by the Air Photo Section, disclosed a number of errors in shoreline and rocks on the latter. Since T-5601 (1934) is accepted as the basic topographic survey of the area, H-5553 (1934-35) has been made to conform to that survey. Where changes were necessary on H-5553 (1934-35) the original condition of the shoreline and rocks, as transferred from T-6118 (1934), is shown on a tracing accompanying the sheet. This tracing should be destroyed when the necessary corrections are applied to the chart.

Corrections by - R. J. Christman, October 28, 1936.

Inspected by - A. L. Shalowitz.

applied addenda to chart 237 - Dec. 1, 1936
[See Letter 782 (1936)]



5553 Additional work (1935)

Applied to new chart 237 D.M.A. Feb. 1936

Applied to Reconstr. of Chs. 1210 thru charts 353 & 273 11-14-61 MR